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PATENT
Attorney Docket No. 101.0053-01000
Customer No. 22882

UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Gary K. Michelson, M.D.

Serial No.: 10/047,545

Filed: January 16, 2002

For: THREADED FRUSTO-CONICAL
INTERBODY SPINAL FUSION
IMPLANTS

(Group Art Unit: 3764)

(Examiner: M. Brown)

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicant brings to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the following documents are enclosed:

1. Abstract Only of European Patent No. 0 162 005
2. Abstract Only of European Patent No. 0 179 695
3. Abstract Only of French Patent No. 2 581 336
4. Abstract Only of French Patent No. 2 703 580
5. Abstract Only of German Patent No. 31 01 333 A1
6. Abstract Only of German Patent No. 31 32 520 A1
7. Abstract Only of German Patent No. 35 05 567 A1

8. Abstract Only of German Patent No. 36 08 163 A1
9. Abstract Only of German Patent No. 43 02 397 A1
10. Great Britain Patent No. 1 291 470, dated October 4, 1972
11. Great Britain Patent No. 1 492 990, dated November 23, 1977
12. Great Britain Patent No. 1 531 487, dated November 8, 1978
13. Translation of Japanese Patent No. 60-31706
14. Translation of Japanese Patent No. 60-43984
15. Translation of Japanese Patent No. 62-155846
16. Translation of Soviet Union Patent No. 1107854
17. Abstract Only of Soviet Union Patent No. 1124960
18. Abstract Only of Soviet Union Patent No. 1217374
19. Abstract Only of Soviet Union Patent No. 1222254
20. English Language Search Report and partial translation for Swedish Patent No. 106 101

Copies of the remaining listed documents were previously submitted in a prior application, Serial No. 08/480,908, filed June 7, 1995, upon which applicant relies for the benefits provided in 35 U.S.C. § 120.

Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicant determines that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.


Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 50-1066.

Respectfully submitted,

MARTIN & FERRARO, LLP

Date: May 8, 2002

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22882

**INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATION**

Applicant

Gary K. Michelson, M.D.

Application Number

10/047,545

(Use several sheets if necessary)

Sheet 1 of 10

Filing Date

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Group Art
Unit

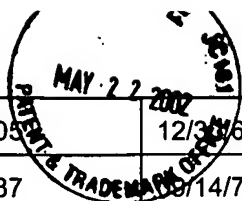
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Examiner

(M. Brown)

COPY OF PAPERS
ORIGINALLY FILED
U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate
	Re. 31,865	04/16/85	Roux			
	Re. 34,871	03/07/95	McGuire et al.			
	Des. 245,259	08/02/77	Shen			
	Des. 257,511	11/11/80	Zahn			
	Des. 260,525	09/01/81	Lassiter			
	Des. 281,814	12/17/85	Pratt et al.			
	Des. 397,439	08/25/98	Koros et al.			
	350,420	10/05/86	Dillon			
	1,137,585	04/27/15	Craig			
	2,065,659	12/29/36	Cullen			
	2,181,746	11/28/39	Siebrandt			
	2,243,718	05/27/41	De G. Moreira			
	2,372,622	03/27/45	Fassio			
	2,514,665	07/11/50	Myller			
	2,537,070	01/09/51	Longfellow			
	2,543,780	03/06/51	Hipps et al.			
	2,677,369	05/04/54	Knowles			
	2,774,350	12/18/56	Cleveland			
	2,789,558	04/23/57	Rush			
	2,832,343	04/29/58	Mose			
	2,842,131	07/08/58	Smith			
	2,878,809	03/24/59	Treace			
	3,128,768	04/14/64	Geistauts			
	3,298,372	01/17/67	Feinberg			
	3,426,364	02/11/69	Lumb			



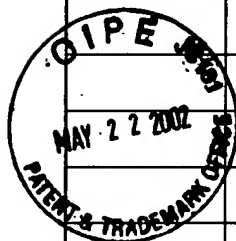
	3,486,505	12/30/69	Morrison			
	3,604,487	09/14/71	Gilbert			
	3,605,123	09/20/71	Hahn			
	3,618,611	11/09/71	Urban			
	3,709,219	01/09/73	Halloran			
	3,720,959	03/20/73	Hahn			
	3,750,652	08/07/73	Sherwin			
	3,848,601	11/19/74	Ma et al.			
	3,867,723	02/25/75	Stubstad et al.			
	3,867,950	02/25/75	Fischell			
	3,875,595	04/08/75	Froning			
	3,855,638	12/24/74	Pilliar			
	3,888,260	06/10/75	Fischell			
	3,892,232	07/01/75	Neufeld			
	3,905,047	09/16/75	Long			
	3,915,151	10/28/75	Kraus			
	3,916,907	11/04/75	Peterson			
	3,918,440	11/11/75	Kraus			
	3,942,535	03/09/76	Schulman			
	3,948,262	04/06/76	Zaffaroni			
	3,952,334	04/27/76	Bokros et al.			
	3,987,499	10/26/76	Scharbach et al.			
	4,016,651	04/12/77	Kawahara et al.			
	4,027,392	06/07/77	Sawyer et al.			
	4,051,905	10/04/77	Kleine			
	4,059,115	11/22/77	Jumashev et al.			
	4,070,514	01/24/78	Entherly et al.			
	4,082,097	04/04/78	Mann et al.			
	4,086,701	05/02/78	Kawahara et al.			
	4,124,026	11/07/78	Berner et al.			
	4,142,517	03/06/79	Stravopoulos et al.			
	4,168,326	09/18/79	Broemer et al.			
	4,175,555	11/27/79	Herbert			
	4,177,524	12/11/79	Grell et al.			



	4,181,457	01/01/80	Holmes			
	4,197,850	04/15/80	Schulman et al.			
	4,206,516	06/10/80	Pilliar			
	4,222,128	09/16/80	Tomonaga et al.			
	4,232,679	11/11/80	Schulman			
	4,232,679 B1	05/31/88	Schulman			
	4,237,948	12/09/80	Jones et al.			
	4,258,716	03/31/81	Sutherland			
	4,259,072	03/31/81	Hirabayashi et al.			
	4,262,369	04/21/81	Roux			
	4,271,832	06/09/81	Evans et al.			
	4,289,123	09/15/81	Dunn			
	4,293,962	10/13/81	Fuson			
	4,309,777	01/12/82	Patil			
	4,328,593	05/11/82	Sutter et al.			
	4,333,469	06/08/82	Jeffcoat et al.			
	4,341,206	07/27/82	Perrett et al.			
	4,349,921	09/21/82	Kuntz			
	4,356,572	11/02/82	Guillemin et al.			
	4,401,112	08/30/83	Rezaian			
	4,405,319	09/20/83	Cosentino			
	4,414,979	11/15/83	Hirshorn et al.			
	4,423,721	01/03/84	Otte et al.			
	4,439,152	03/27/84	Small			
	4,450,834	05/29/84	Fischer			
	4,484,570	11/27/84	Sutter et al.			
	4,492,226	01/08/85	Belykh et al.			
	4,497,320	02/05/85	Nicholson et al.			
	4,501,269	02/26/85	Bagby			
	4,507,115	03/26/85	Kambara et al.			
	4,530,360	07/23/85	Duarte			
	4,535,374	08/13/85	Anderson et al.			
	4,535,485	08/20/85	Ashman et al.			
	4,542,539	09/24/85	Rowe, Jr. et al.			



	4,545,374	10/08/85	Jacobson			
	4,547,390	10/15/85	Ashman et al.			
	4,549,547	10/29/85	Brighton et al.			
	4,552,200	11/12/85	Sinha et al.			
	4,553,273	11/19/85	Wu			
	4,554,914	11/26/85	Kapp et al.			
	4,570,623	02/18/86	Ellison et al.			
	4,570,624	02/18/86	Wu			
	4,592,346	06/03/86	Jurgutis			
	4,599,086	07/08/86	Doty			
	4,600,000	07/15/86	Edwards			
	4,602,638	07/29/86	Adams			
	4,604,995	08/12/86	Stephens			
	4,608,052	08/26/86	Van Kampen et al.			
	4,611,581	09/16/86	Steffee			
	4,619,264	10/28/86	Singh			
	4,628,921	12/16/86	Rousso			
	4,634,720	01/06/87	Dorman et al.			
	4,636,217	01/13/87	Ogilvie et al.			
	4,636,526	01/13/87	Dorman et al.			
	4,645,503	02/24/87	Lin et al.			
	4,653,486	03/31/87	Coker			
	4,655,777	04/07/87	Dunn			
	4,661,536	04/28/87	Dorman et al.			
	4,664,567	05/12/87	Edwards			
	4,665,920	05/19/87	Campbell			
	4,677,883	07/07/87	Lee			
	4,677,972	07/07/87	Tornier			
	4,693,721	09/15/87	Ducheyne			
	4,696,290	02/29/87	Steffee			
	4,698,375	10/06/87	Dorman et al.			
	4,710,075	12/01/87	Davison			
	4,713,004	12/15/87	Linkow et al.			
	4,714,469	12/22/87	Kenna			



COPY OF PAPERS
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	4,721,103	01/26/88	Freedland			
	4,736,738	04/12/88	Lipovsek et al.			
	4,743,256	05/10/88	Brantigan			
	4,743,260	05/10/88	Burton			
	4,759,766	07/26/88	Buettner-Janz et al.			
	4,759,769	07/26/88	Hedman et al.			
	4,769,881	09/13/88	Pedigo et al.			
	4,781,591	11/01/88	Allen			
	4,790,303	12/13/88	Steffee			
	4,805,602	02/21/89	Puno et al.			
	4,820,305	04/11/89	Harms et al.			
	4,830,000	05/16/89	Shutt			
	4,834,757	05/30/89	Brantigan			
	4,848,327	07/18/89	Perdue			
	4,851,008	07/25/89	Johnson			
	4,863,476	09/05/89	Shepperd			
	4,863,477	09/05/89	Monson			
	4,865,603	09/12/89	Noiles			
	4,877,020	10/31/89	Vich			
	4,878,915	11/07/89	Brantigan			
	4,903,882	02/27/90	Long			
	4,904,260	02/27/90	Ray et al.			
	4,904,261	02/27/90	Dove et al.			
	4,911,718	03/27/90	Lee et al.			
	4,913,144	04/03/90	Del Medico			
	4,936,848	06/26/90	Bagby			
	4,943,291	07/24/90	Tanguy			
	4,955,885	09/11/90	Meyers			
	4,955,908	09/11/90	Frey et al.			
	4,957,495	09/18/90	Kluger			
	4,960,420	10/02/90	Goble et al.			
	4,961,740	10/09/90	Ray et al.			
	4,968,316	11/06/90	Hergenroeder			
	4,969,888	11/13/90	Scholten et al.			

COPY OF PAPERS
ORIGINALY FILED



	4,987,904	01/29/91	Wilson			
	5,015,247	05/14/91	Michelson			
	5,015,255	05/14/91	Kuslich			
	5,026,373	06/25/91	Ray et al.			
	5,030,236	07/09/91	Dean			
	5,055,104	10/08/91	Ray			
	5,059,193	10/22/91	Kuslich			
	5,062,845	11/05/91	Kuslich et al.			
	5,071,437	12/10/91	Steffee			
	5,084,050	01/28/92	Draenert			
	5,102,414	04/07/92	Kirsch			
	5,108,422	04/28/92	Green et al.			
	5,112,336	05/12/92	Krevolin et al.			
	5,116,304	05/26/92	Cadwell			
	5,122,130	06/16/92	Keller			
	5,123,926	06/23/92	Pisharodi			
	5,171,278	12/15/92	Pisharodi			
	5,192,327	03/09/93	Brantigan			
	5,246,458	09/21/93	Graham			
	5,258,031	11/02/93	Salib et al.			
	5,263,953	11/23/93	Bagby			
	5,279,292	01/18/94	Baumann et al.			
	5,292,252	03/08/94	Nickerson et al.			
	5,306,309	04/26/94	Wagner et al.			
	5,314,427	05/24/94	Goble et al.			
	5,324,295	06/28/94	Shapiro			
	5,352,229	10/04/94	Goble et al.			
	5,360,430	11/01/94	Lin			
	5,364,399	11/15/94	Lowery et al.			
	5,370,662	12/06/94	Stone et al.			
	5,370,697	12/06/94	Baumgartner			
	5,393,036	02/28/95	Sheridan			
	5,396,880	03/14/95	Kagan et al.			
	5,397,364	03/14/95	Kozak et al.			

	5,425,772	06/20/95	Brantigan			
	5,435,723	07/25/95	O'Brien			
	5,443,514	08/22/95	Steffee			
	5,458,638	10/17/95	Kuslich et al.			
	5,489,307	02/06/96	Kuslich et al.			
	5,489,308	02/06/96	Kuslich et al.			
	5,571,109	11/05/96	Bertagnoli			
	5,669,909	09/23/97	Zdeblick et al.			
	5,683,463	11/04/97	Godefroy et al.			
	5,766,252	06/16/98	Henry et al.			
	5,906,616	05/25/99	Pavlov et al.			

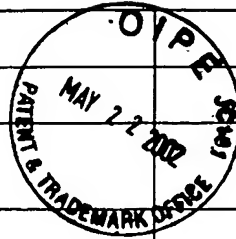


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FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Sub Class	Translation Yes or No
	0 077 159	04/20/83	Europe			
	0 162 005	11/21/85	Europe			Abstract Only
	0 179 695	04/30/86	Europe			Abstract Only
	0 260 044	03/16/88	Europe			
	0 303 241 A2	02/15/89	Europe			
	0 307 241	03/15/89	Europe			Yes
	0 499 465 A1	08/19/92	Europe			
	0 551 187 A1	07/14/93	Europe			
	0 577 179 A1	01/05/94	Europe			
	0 599 419 A2	06/01/94	Europe			Yes
	0 732 093 A2	09/18/96	Europe			
	2 295 729	07/23/76	France			UK Equivalent GB 1531487
	2 581 336	11/07/86	France			Abstract Only
	2 703 580	10/14/94	France			Abstract Only
	1 961 531	07/09/70	Germany			UK Equivalent GB 1291470
	24 46 039	04/03/75	Germany			UK Equivalent GB 1492990
	31 01 333 A1	12/24/81	Germany			Abstract Only
	31 32 520 A1	06/16/82	Germany			Abstract Only

COPY OF PAPERS
ORIGINALLY FILED



	35 05 567 A1	06/05/86	Germany		Abstract Only
	36 08 163 A1	09/24/87	Germany		Abstract Only
	41 04 359 A1	08/20/92	Germany		US Equivalent 5,279,292
	43 02 397 A1	07/29/93	Germany		Abstract Only
	1 291 470	10/04/72	Great Britain		N/A
	1 492 990	11/23/77	Great Britain		N/A
	1 531 487	11/08/78	Great Britain		N/A
	2 076 657 A	12/09/81	Great Britain		
	2 082 754 A	03/10/82	Great Britain		
	2 126 094 A	03/21/84	Great Britain		
	2 164 277 A	03/19/86	Great Britian		
	57-29348	02/17/82	Japan		
	60-31706	02/18/85	Japan		Yes
	60-43984	03/08/85	Japan		Yes
	61-122859	06/10/86	Japan		US Equivalent 4,759,766
	62-155846	07/10/87	Japan		Yes
	1107854	08/15/84	Soviet Union		Yes
	1124960	11/23/84	Soviet Union		Abstract Only
	1217374	03/15/86	Soviet Union		Abstract Only
	1222254	04/07/86	Soviet Union		Abstract Only
	283078	05/01/85	Spain		US Equivalent 4,877,020
	106 101	07/21/39	Sweden		English Language Search Report & Partial Translation
	84/01298	04/12/84	WIPO		
	91/06266	05/16/91	WIPO		
	92/14423	09/03/92	WIPO		
	93/01771	02/04/93	WIPO		

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Adams, et al.; Outline of Orthopaedics, Eleventh Edition; Trunk and Spine, p. 194
	Herkowitz, et al.; Principles of Bone Fusion; The Spine, Third Edition; Chapter 44, p. 1739
	Muschler, et al.; The Biology of Spinal Fusion; Spinal Fusion Science and Technique, Cotler and Cotler, pp. 9-13.

	Zindrick, et al.; Lumbar Spine Fusion: Different Types and Indications; The Lumbar Spine, Vol. 1, Second Edition, pp. 588-593 (1996)
	Gillingham, F.J., et al.; Automatic Patient Monitoring in the Ward; Brit. J. Surg., Vol. 53, No. 10, pp. 864-866 (October 1966)
	Maloney, A.F.J., et al.; Clinical and Pathological Observations in Fatal Head Injuries, Brit. J. Surg., Vol. 56, No. 1, pp. 23-31 (January 1969)
	Harris, P., et al.; Spinal Deformity After Spinal Cord Injury; Paraplegia, Vol. 6, No. 4, pp. 232-238 (February 1969)
	Gillingham, F.J., et al.; Head injuries; Proceedings of the 18 th World Congress of the International College of Surgeons, Rome, pp. 68-71 (May 28-31, 1972)
	Whatmore, W. J.; Sincipital Encephalomeningoceles; Brit. J. Surg., Vol. 60, No. 4, pp. 261-270 (April 1973)
	Whatmore, W. J.; Meningioma Following Trauma; Brit. J. Surg., Vol. 60, No. 6, pp. 496-498 (June 1973)
	Bagby, George W.; Wobbler Syndrome in Horses (the Ataxic Horse); Spokane County Medical Society Bulletin; Spring 1979
	Rathke, F.W., et al.; Surgery of the Spine; Atlas of Orthopaedic Operations, Vol. 1, p. 137, W.B. Saunders Co., Philadelphia (1979)
	Albrektsson, T., et al.; Osseointegrated Titanium Implants; Acta. Orthop. Scand.; Vol. 52:155-170 (1981)
	Raveh, J., et al.; Neue Rekonstruktionsmöglichkeiten des Unterkiefers bei knöchernen Defekten nach Tumorsektionen; Der Chirurg Vol. 53:459-467 (1982)
	Crock, H. V.; Practice of Spinal Surgery; Springer-Verlag/Wien, New York (1983)
	DeBowes, R.M., et al.; Study of Bovine...Steel Baskets; Transactions of the 29th Annual Meeting; Orthopaedic Research Society, Vol. 8, p. 407, March 8-10 (1983)
	O'Neill, P., et al.; Spinal Meningoceles in Association with Neurofibromatosis; Neurosurgery, Vol. 13, No. 1, pp. 82-84 (July 1983)
	Brandt, L., et al.; A Dowel Insert for Anterior Cervical Interbody Fusion; J. Neurosurg. 61:793-794 (October 1984)
	Whatmore, W.J., et al.; The Coventry Cervical Spreader and Dowel Insert; ACTA Neurochirurgica, Vol. 70, FASC. 1-2 (1984)
	Raveh, J., et al.; Use of the Titanium-coated Hollow Screw and Reconstruction Plate System in Bridging of Lower Jaw Defects; J. Oral Maxillofac Surg. 42:281-294 (1984)
	Otero-Vich, Jose M.; Anterior Cervical Interbody Fusion with Threaded Cylindrical Bone; J. Neurosurg 63:750-753 (November 1985)
	Morscher, E., et al.; Die vordere Verplattung der Halswirbelsäule mit dem Hohlschrauben-Plattensystem aus Titanium, <i>Der Chirurg</i> , Vol. 57, pp. 702-707 (1986) with English Translation
	Bagby, G.W.; Basket Implant Facilitates Spinal Fusion; Orthopedics Today, Vol. 7, No. 10, (October 1987)
	Butts, M. K., et al.; Biomechanical Analysis of a New Method for Spinal Interbody Fixation; 1987 Symposium, American Society of Mechanical Engineers, "Advances in Bioengineering", Boston, MA (Dec. 13-18, 1987)
	Crawley et al.; A Modified Cloward's Technique for Arthrodesis of the Normal Metacarpophalangeal Joint in the Horse; Veterinary Surgery, Vol. 17, No. 3, pp. 117-127 (1988)



	Raveh, J., et al.; Surgical Procedures for Reconstruction of the Lower Jaw Using the Titanium-Coated Hollow-Screw Reconstruction Plate System: Bridging of Defects; Otolaryngologic Clinics of North America; Vol 20, No. 3 (August 1987)		
	Whatmore, W. J.; Proceedings of the Society of British Neurological Surgeons; Journal of Neurology, Neurosurgery, and Psychiatry, 50:1093-1100 (1987)		
	Goldthwaite, N., et al.; Toward Percutaneous Spine Fusion; Ch. 45; Lumbar Spine Surgery; C.V. Mosby Company, pp. 512-522 (1987)		
	Bagby, G.W.; Arthrodesis by the Distraction-Compression Method Using a Stainless Steel Implant; Orthopedics, Vol. II, No. 6, pp. 931-34 (June 1987)		
	Itoman, M., et al.; Banked Bone Grafting for Bone Defect Repair--Clinical Evaluation of Bone Union and Graft Incorporation; J. Jpn. Orthop. Assoc. 62:461-469 (1988)		
	Kane, W.J.; Direct Current Electrical Bone Growth Stimulation for Spinal Fusion; Spine, Vol. 13, No. 3, pp. 363-365 (March 1988)		
	The SpF-T Spinal Fusion Stimulator: An Efficacious Adjunct that Meets the Diverse Needs of Spine Patients; EBI Medical Systems; (August 1991)		
	Schmitz et al.; Performance of Alloplastic Materials and Design of an Artificial Disc; The Artificial Disc, Brock, Mayer, Weigel; pp. 23-34 (1991)		
	The Use of Direct Current for Electrically Induced Osteogenesis; The Positive Effect of an Electronegative charge on Bone Growth; EBI Medical Systems (Feb. 1993)		
	Mylonas, C., et al.; Anterior Cervical Decompression and Fusion Using the Coventry Cervical Spreader and Dowel Inserter; British Journal of Neurosurgery, 7:545-549 (1993)		
	Fusion of the Lumbar Spine; Anterior Monosegmental Fusion L5-S1, Atlas of Spinal Operations, Thieme, pp. 270-274 (1993)		
	Spine Basics, Danek Group, Inc., Glossary (1993)		
	Lumbar Spine Surgery, Techniques & Complications; History of Lumbar Spine Surgery (1994) pp. 11-15; 27; 30; 35-45; 265-268		
Examiner		Date Considered	
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